## DEPARTMENT OF ENERGY HOISTING AND RIGGING TECHNICAL ADVISORY COMMITTEE MEETING MINUTES

Las Vegas, NV May 12, 2005

The Chairman, Pat Finn, Department of Energy (DOE-HQ, EH-22) called the meeting of the DOE Hoisting and Rigging Technical Advisory Committee (HRTAC) to order. Mr. Finn welcomed attendees and introductions were made. A brief review of recent events was conducted.

Following the introductory remarks, the following presentations were made:

- 1. Mr. Steve Kane (Brookhaven National Lab) proposed deleting existing requirements within DOE-STD-1090 for proof testing of rigging and rigging accessories used for critical lifts. After considerable discussion and a committee vote, this proposal was rejected.
- 2. Mr. Dana Morgan (Fluor Hanford) led a discussion concerning provisions of Chapter 8, *Hoists*, and Chapter 13, *Load Hooks*, that when taken together may result in prohibiting the use of hoists whose manufacturer supplied hooks do not meet the marking requirements of Chapter 13. A motion passed directing Messrs. Morgan and Finn to develop clarifying language in the next revision to DOE-STD-1090 that would permit the use of hoist manufacturer supplied hooks (or manufacturer supplied replacement hooks.) This clarification will apply solely to hooks supplied by hoist manufacturers and not to hooks furnished as part of sling assemblies.
- 3. Mr. Steve Waisanen (Morris/P&H Cranes) made a presentation on several new technologies developed by his company that may be of interest to the DOE Hoisting & Rigging community. These included a computerized crane runway survey machine, Clean Crane Lube (for gearboxes), and a remotely operated crane retrieval device.
- 4. Mr. John Hynan (Brookhaven) made a proposal to address difficulties in receiving manufacturer approval for forklift attachments and modifications (refer to DOE-STD-1090, Sections 10.1.4 and 10.1.5). Mr. Hynan suggested revised language that would allow for local dealer/distributor approval of attachments and modifications. This proposal was rejected by the committee. However, there was considerable discussion of relevant OSHA standards (29 CFR 1910.178 (a)(4&5)) and whether onsite engineering evaluations could substitute for manufacturer approval in instances of manufacturer nonresponsiveness or disapproval. Mr. Finn agreed to research this issue further and provide a formal response to a forthcoming DOE Response Line interpretations request by Messrs. Baxley or Hynan. This formal response would form the basis for any future changes to Chapter 10 of DOE-STD-1090. (Note: Preliminary research subsequent to the

meeting discovered the following OSHA letter of <u>interpretation</u> which will likely be relied upon in subsequent DOE-EH review of any Response Line interpretations request.)

5. Mr. Lynn Holt (Idaho National Lab) made a proposal to clarify requirements concerning the inspection and use of manufacturer supplied lift points installed on equipment. His proposal was approved and will result in the following changes to DOE-STD-1090.

A new section 12.1.b. will be added and will read as follows:

- b. All manufacturer provided lift points designed for and installed on engineered or manufactured equipment are considered part of the equipment and are acceptable for their intended use. Manufacturer supplied lift points shall:
  - 1. Meet manufacturer's pre-operational inspection, testing, and maintenance criteria.
  - 2. Be inspected by a qualified person prior to use.
  - 3. Used in accordance with manufacturer's instructions. In the absence of such information, further qualified technical support may be needed

Section 12.4.1.a. will be revised by deleting all but the first sentence of this section.

- 6. Mr. Claude Robison (Oak Ridge Nat'l. Lab) made a presentation on the recent implementation of DOE-STD-1090-2004 as a mandatory requirement at the Lab following an overhead crane accident there in 2004.
- 7. Mr. James Miller (BNFL, Oak Ridge) reviewed the hoisting and rigging program in place for a large scale decommissioning and demolition (D&D) project at Oak Ridge's East Tennessee Technology Park (ETTP).
- 8. Mr. Mike Berry (WGI, Savannah River) led a discussion on the use of rigging equipment (e.g., slings, shackles) in horizontal applications for towing or tugging. The discussion focused on whether or not a reduced design factor could be used for rigging gear in horizontal applications than is used for hoisting operations (i.e., 5 to 1). Also discussed were considerations for the removal of rigging equipment from hoisting service if it had been used for towing or tugging, particularly if lower design factors (e.g., 3 to 1) were utilized. Mr. Berry agreed to do further research in this area to include whether any other OSHA/national consensus standards or Military or Federal Specifications addressed such applications. Upon completion of this research, Mr. Berry would prepare a letter ballot to address this issue.

- 9. Mr. Lynn Holt proposed changing how "Designated Leader" is defined within Section 1, *Definitions*. His proposal was approved and the new definition for "Designated Leader" will read as follows: 'An individual assigned responsibility for safe handling of ordinary lifts. The designated leader shall be present at the lift site during the entire lifting operation. If the lift is being made by only one person, that person assumes all responsibilities of the designated leader."
- 10. Mr. Mike Viola (Princeton Plasma Physics Lab) made a presentation on possible conflicts in the required clearances between overhead electrical lines and cranes as prescribed by OSHA regulations, the National Electric Code, ANSI/ASME standards, and DOE-STD-1090-2004. Despite preliminary concerns that there may have been conflicts that need to be resolved within DOE-STD-1090, Mr. Viola concluded that no changes needed to be made within DOE-STD-1090. The Committee concurred.
- 11. Mr. Pat Finn reviewed proposed changes to synthetic sling requirements of Chapter 11 brought about as a result of a complimentary review of this section by Mr. Mike Gelskey, President of Lift-It, Inc. Mr. Gelskey's comments were reviewed in detail prior to the committee meeting in a teleconference between Messrs. Finn, Mike Berry, Dana Morgan, Ray Pope and Mike Viola. Comments addressing editorial errors or DOE-STD-1090 provisions that no longer reflected current ASME B30.9 requirements were generally adopted. Those that reflected the proprietary interests of Lift-It or were not yet addressed by ASME B30.9 were generally rejected. In summary, other than the editorial comments, the primary revisions dealt with updating removal from service requirements of synthetic web slings and roundslings as well as the capacity charts for both sling types. The proposed revisions to Chapter 11 were approved by committee vote.
- 12. Mr. Richard Niles (Lawrence Livermore National Laboratory) suggested deleting provision 9.5.1.4.a. which states "*Always use the shortest boom possible*," as this provision doesn't always accurately reflect crane load capacities. The committee concurred. Furthermore, the title of Section 9.5.1.4 will be revised to read "*Further Safety Considerations*."
- 13. Dana Morgan provided an overview of recent activities of the ANSI/ASME B30 standards committee including actions on B30.5, *Mobile Cranes;* B30.9, *Slings;* B30.26, *Rigging Accessories;* and the new Below-the-Hook Lifting Device Design Standard (to supplement B30.20).
- 14. Mr. Mike Viola reported a product recall that he recently became aware of involving older Merrill plate lifting clamps (currently sold under the name Campbell by Cooper Hand Tools). The recalled plate clamp was a straight screw type of clamp. It is outdated and should be immediately taken out of service. These older model clamps do not have a cam type foot and therefore rely on the screw tightening force alone to grip a plate. The newer Screw Adjusted Cam (SAC) clamps have a cam action foot that slightly rotates thereby closing the gap

- and self tightening on the plate. Per Mr. Viola, <u>Cooper Hand Tools</u> with offer a 50% discount on purchase of the newer clamp when the older model is returned.
- 15. Mr. Pat Finn suggested that wording be added to DOE-STD-1090 to acknowledge crane operator certification by the National Commission for the Certification of Crane Operators (NCCCO), a program in use at a number of DOE sites. A proposal was made to add the following provision under Section 6.2.1: "At the site's discretion, crane operator certification by the National Commission for the Certification of Crane Operators (NCCCO) may be used to verify compliance with qualification requirements described hereunder for covered classes of equipment." This proposal was passed by committee vote.

After a brief period of open discussion, the meeting was adjourned.